

## 2018 Beltwide Cotton Conference

**Workshop Title:** Risk & Reward: Small Unmanned Aircraft Systems (sUAS) for Agricultural Producers

**Duration:** 4hrs

**Purpose:**

The overall goal of the workshop is to introduce attendees to small unmanned aircraft systems (sUAS). It is estimated that 80% of commercial sUAS users will be in agriculture. This workshop will focus on risk-based trainings for current and future commercial users of this emerging technology. The workshop will include presentations on aircraft systems and a workflow demonstration since most initial users are uneasy about the technology. Participants should achieve an improved understanding of flight regulations, types of platforms & sensors, data processing, potential agricultural uses, and liability issues related to UAS. Participants will also make improved decisions to match the best sUAS with their needs.

**Workshop presenters**

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|---|---|--|---|
| <b>James Robbins, Ph.D.</b><br>Univ. of Ark. System<br>Div. of Agric. CES | <b>Joe Mari Maja, Ph.D.</b><br>Edisto Research and<br>Education Center,<br>Clemson University | <b>Rusty Rumley, Ph.D.</b><br>The National<br>Agricultural Law<br>Center | <b>Mengmeng Gu, Ph.D.</b><br>Texas A&M Agrilife |
| <i>Professor/Ext.<br/>Specialist – Orn. Hort.</i>                         | <i>Research Sensor<br/>Engineer</i>   | <i>Senior Staff Attorney</i>   | <i>Assoc. Prof./Extension – Hort.</i>           |

**Workshop outline:**

Topics:

- a. Liability/risk: (45min) negligence; nuisance/trespass; imagery/privacy; need to license; shooting down a drone; insurance?
- b. Regulations to fly: 45 min
  1. Types of users: Hobby/recreational, Public, Commercial
  2. NOTAM: process & viewing current
  3. Preparation for Remote Pilot Certification (Part 107)
- c. Types of aircraft: 30 min (adv. & disadv. of each)
  1. Rotary
  2. Fixed-wing
- d. Types of sensors (20 min)
- e. Software (30 min)
- f. Flight demonstration (1hr)
  1. Attendees (5) demonstrate (15 min)
  2. We demonstrate the workflow: flight, image capture, and viewing (45 min)

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United States Department of Agriculture  
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